



Natural Gas Analysis Report

GPA 2172-09/API 14.5 Report with GPA 2145-16 Physical Properties

	Sample Information
Sample Name	MESA VERDE WEST CGL FUEL INLET
Technician	ANTHONY DOMINGUEZ
Analyzer Make & Model	INFICON MICRO GC
Last Calibration/Validation Date	03-02-2023
Meter Number	NA
Air temperature	60
Flow Rate (MCF/Day)	0
Heat Tracing	HEATED HOSE & GASIFIER
Sample description/mtr name	MESA VERDE WEST CGL FUEL INLET
Sampling Method	FILL & EMPTY
Operator	OCCIDENTAL PETROLEUM
State	NEW MEXICO
Region Name	PERMIAN_RESOURCES
Asset	NEW MEXICO
System	EAST
FLOC	NA
Sample Sub Type	NA
Sample Name Type	NA
Vendor	AKM MEASUREMENT
Cylinder #	2283
Sampled by	JONATHAN ALDRICH
Sample date	3-2-2023
Analyzed date	3-7-2023
Method Name	C9
Injection Date	2023-03-07 12:33:09
Report Date	2023-03-07 12:37:19
EZReporter Configuration File	1-16-2023 OXY GPA C9+ H2S #2.cfgx
Source Data File	fcda66e9-c1ef-4a8f-ae9-ea6de38c05d8
NGA Phys. Property Data Source	GPA Standard 2145-16 (FPS)
Data Source	INFICON Fusion Connector

Component Results

Component Name	Peak Area	Raw Amount	Response Factor	Norm Mole%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)	
Nitrogen	30907.4	1.7419	0.00005636	1.7389	0.0	0.01682	0.192	
Methane	1000235.4	73.2830	0.00007327	73.1558	740.6	0.40521	12.446	
CO2	108850.0	5.1443	0.00004726	5.1354	0.0	0.07803	0.880	
Ethane	229751.6	10.4553	0.00004551	10.4371	185.1	0.10836	2.801	
H2S	0.0	0.0000	0.00000000	0.0000	0.0	0.00000	0.000	
Propane	174120.4	5.7057	0.00003277	5.6958	143.6	0.08672	1.575	
iso-butane	71399.0	0.7935	0.00001111	0.7921	25.8	0.01590	0.260	
n-Butane	169558.3	1.8625	0.00001098	1.8593	60.8	0.03731	0.588	
iso-pentane	43430.7	0.4219	0.00000971	0.4211	16.9	0.01049	0.155	
n-Pentane	46265.0	0.4381	0.00000947	0.4373	17.6	0.01089	0.159	
hexanes	26114.0	0.1984	0.00000760	0.1981	9.4	0.00589	0.082	
heptanes	15853.0	0.0990	0.00000624	0.0988	5.4	0.00342	0.046	
octanes	4915.0	0.0274	0.00000558	0.0274	1.7	0.00108	0.014	
nonanes+	466.0	0.0029	0.00000619	0.0029	0.2	0.00013	0.002	
Total:		100.1739		100.0000	1207.2	0.78025	19.199	

Results Summary

Result	Dry	Sat.	
Total Un-Normalized Mole%	100.1739		
Pressure Base (psia)	14.730		
Temperature Base (Deg. F)	60.00		
Flowing Temperature (Deg. F)	0.0		
Flowing Temperature (Deg. F)	178.0		

Result	Dry	Sat.	
Gross Heating Value (BTU / Ideal cu.ft.)	1207.2	1186.2	
Gross Heating Value (BTU / Real cu.ft.)	1211.8	1191.2	
Relative Density (G), Real	0.7829	0.7804	

Monitored Parameter Report

Parameter	Value	Lower Limit	Upper Limit	Status	
Total un-normalized amount	100.1739	97.0000	103.0000	Pass	

UPSET VENTING EVENT SPECIFIC JUSTIFICATIONS FORM

Facility: Mesa Verde West CGL

Vent Date: 09/22/2023

Cumulative Duration of Event: 7 Hours 59 Minutes

MCF Vent: 95

Start Time: 4 PM

End Time: 11:59 PM

Cause: Venting > Equipment Malfunctions > Compressor Unit # 5 > Malfunctions > Valve Issue

1. Reason why this event was beyond Operator's control:

This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. It is OXY's policy to route all stranded gas to a flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions, when possible, yet, in this case, this venting event occurred as a result of a 1" drain ball valve that was found open on the suction scrubber of gas compressor unit # 5 due to error from third party from NGSG and was not discovered until the next morning on September 23, 2023. Notwithstanding facility design and operation, emergencies and malfunctions, can occur without warning, be sudden, unforeseeable and unavoidable. Oxy continually strives to maintain and operate in a manner consistent with good practice for minimizing emissions and reducing the number of emission events. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

2. Steps Taken to limit duration and magnitude of venting or flaring:

This facility is unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. It is OXY's policy to route all stranded gas to a flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions, when possible, yet, in this case, this venting event occurred as a result of a 1" drain ball valve that was found open on the suction scrubber of gas compressor unit # 5 due to error from third party from NGSG during their preventative maintenance work and was not discovered by Oxy's technicians until the next morning on September 23, 2023. Notwithstanding facility design and operation, emergencies and malfunctions, can occur without warning, be sudden, unforeseeable and unavoidable. Oxy continually strives to maintain and operate in a manner consistent with good practice for minimizing emissions and reducing the number of emission events. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.

3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

Oxy is limited in its ability to take any corrective actions to eliminate the cause and potential reoccurrence of unexpected equipment malfunctions caused by third party vendors. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to continue with its equipment preventative maintenance program for this facility and continue with its field training with its personnel to follow up with vendors regarding their maintenance work.

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District IV
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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

DEFINITIONS

Action 273872

DEFINITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 273872
	Action Type: [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: • this application's operator, hereinafter "this operator"; • venting and/or flaring, hereinafter "vent or flare"; • any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms"; • the statements in (and/or attached to) this, hereinafter "the statements in this"; • and the past tense will be used in lieu of mixed past/present tense questions and statements.
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QUESTIONS

Action 273872

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 273872
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Prerequisites Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.	
Incident Well	Unavailable.
Incident Facility	[fAPP2127051155] MESA VERDE WEST CGL COMP STATION

Determination of Reporting Requirements Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.	
Was this vent or flare caused by an emergency or malfunction	Yes
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a vent or flare event	Yes, minor venting and/or flaring of natural gas.
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.	
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No
Was the vent or flare within an incorporated municipal boundary or within 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

Equipment Involved	
Primary Equipment Involved	Other (Specify)
Additional details for Equipment Involved. Please specify	Venting > Equipment Malfunctions > Compressor Unit # 5 > Malfunctions > Valve Issue

Representative Compositional Analysis of Vented or Flared Natural Gas Please provide the mole percent for the percentage questions in this group.	
Methane (CH4) percentage	73
Nitrogen (N2) percentage, if greater than one percent	2
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	5
Oxygen (O2) percentage, if greater than one percent	0
If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.	
Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 273872

QUESTIONS (continued)

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	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	09/22/2023
Time vent or flare was discovered or commenced	04:00 PM
Time vent or flare was terminated	11:59 PM
Cumulative hours during this event	8

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Other Other (Specify) Natural Gas Flared Released: 95 Mcf Recovered: 0 Mcf Lost: 95 Mcf.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Estimated Vent Calculations
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	Not answered.
Downstream OGRID that should have notified this operator	Not answered.
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this operator's control	This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. It is OXY's policy to route all stranded gas to a flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions, when possible, yet, in this case, this venting event occurred as a result of a 1" drain ball valve that was found open on the suction scrubber of gas compressor unit # 5 due to error from third party from NGSG and was not discovered until the next morning on September 23, 2023. Notwithstanding facility design and operation, emergencies and malfunctions, can occur without warning, be sudden, unforeseeable and unavoidable. Oxy continually strives to maintain and operate in a manner consistent with good practice for minimizing emissions and reducing the number of emission events. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible. This facility is unmanned, except when Oxy production techs are gathering data daily or conducting daily walk-throughs to ensure that there are no problems, circumstances and/or assist other personnel on-site for maintenance purposes. This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or

Steps taken to limit the duration and magnitude of vent or flare	process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. It is OXY's policy to route all stranded gas to a flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions, when possible, yet, in this case, this venting event occurred as a result of a 1" drain ball valve that was found open on the suction scrubber of gas compressor unit # 5 due to error from third party from NGSG during their preventative maintenance work and was not discovered by Oxy's technicians until the next morning on September 23, 2023. Notwithstanding facility design and operation, emergencies and malfunctions, can occur without warning, be sudden, unforeseeable and unavoidable. Oxy continually strives to maintain and operate in a manner consistent with good practice for minimizing emissions and reducing the number of emission events. This event is out of OXY's control, yet OXY made every effort to control and minimize emissions as much as possible.
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	Oxy is limited in its ability to take any corrective actions to eliminate the cause and potential reoccurrence of unexpected equipment malfunctions caused by third party vendors. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. Oxy has a strong and positive equipment preventative maintenance program in place. The only actions that Oxy can take and handle that is within its control, is to continue with its equipment preventative maintenance program for this facility and continue with its field training with its personnel to follow up with vendors regarding their maintenance work.

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ACKNOWLEDGMENTS

Action 273872

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	Action Number: 273872
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ACKNOWLEDGMENTS

☒	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☒	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
☒	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
☒	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
☒	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

Action 273872

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	Action Number: 273872
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
marialuna2	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	10/9/2023